Application Serial No.: 10/664,432 Amendment dated: July 21, 2006

Response to Office Action dated June 22, 2006

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## 1. (canceled)

- 2. (currently amended) The method of claim 1 11 wherein the delivery vehicle is powdered bone, tricalcium phosphate, hydroxyapatite, polymethacrylate, a biodegradable polyester, an aqueous polymeric gel, or a fibrin sealant.
- 3. (currently amended) The method of claim 4 11 wherein the composition is locally administered at a site of a bony defect.
- 4. (original) The method of claim 3 wherein the bony defect is a fracture, bone graft site, implant site, or periodontal pocket.
- 5. (currently amended) The method of claim 1 11 wherein the composition is administered systemically.

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- 6. (currently amended) The method of claim  $\pm 11$  wherein the dimeric protein is covalently linked to a bone-targetting agent.
- 7. (currently amended) The method of claim 4 11 wherein the composition is locally administered at a joint.
- 8. (currently amended) The method of claim 4 11 wherein the composition further comprises a protein selected from the group consisting of insulin-like growth factor 1, platelet-derived growth factor, epidermal growth factor, transforming growth factor-alpha, transforming growth factor-beta, a bone morphogenetic protein, parathyroid hormone, osteoprotegerin, a fibroblast growth factor, and a protein comprising residues 258-370 of SEQ ID NO:5.
- 9. (currently amended) The method of claim 4 11 wherein the protein is a homodimer.

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## 10. (canceled)

11. (currently amended) A method for promoting growth of bone, ligament, or cartilage in a mammal comprising administering to said mammal a composition comprising:

a pharmacologically effective amount of a dimeric protein comprising a first polypeptide chain disulfide bonded to a second polypeptide chain, each of said chains comprising of residues 235-345 of SEQ ID NO:2-or SEQ ID NO:4; and

a pharmaceutically acceptable delivery vehicle.

- 12. (original) The method of claim 11 wherein each of said chains consists of residues X-345 of SEQ ID NO:2, wherein X is an integer from 226 to 235, inclusive.
- 13. (original) The method of claim 11 wherein each of said chains consists of residues X-345 of SEQ ID NO:2, wherein X is an integer from 15 to 20, inclusive.

## 14-21. (canceled)

22. (currently amended) A method for stimulating proliferation of osteoblasts or chondrocytes in a mammal comprising administering to the mammal a composition comprising:

a pharmacologically effective amount of a dimeric protein comprising <u>a first</u> polypeptide chain disulfide bonded to a second polypeptide chain, each of said chains comprising residues 235-345 of SEQ ID NO:2-or SEQ ID NO:4; and

a pharmaceutically acceptable delivery vehicle.

23. (original) The method of claim 22 wherein the delivery vehicle is powdered bone, tricalcium phosphate, hydroxyapatite, polymethacrylate, a biodegradable polyester, an aqueous polymeric gel, or a fibrin sealant.

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24. (original) The method of claim 22 wherein the protein is covalently linked to a bone-targetting agent.

- 25. (original) The method of claim 22 wherein the composition further comprises a protein selected from the group consisting of insulin-like growth factor 1, platelet-derived growth factor, epidermal growth factor, transforming growth factor-alpha, transforming growth factor-beta, a bone morphogenetic protein, parathyroid hormone, osteoprotegerin, a fibroblast growth factor, and a protein comprising residues 258-370 of SEQ ID NO:5.
- 26. (currently amended) The method of claim 22 wherein the protein comprises a first polypeptide chain-disulfide bonded to a second polypeptide chain, each of said chains consists of residues X-345 of SEQ ID NO:2, wherein X is an integer from 226 to 235, inclusive.